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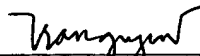
Applicant: Vock et al. ) Date: January 3, 2005  
)  
Serial No.: 09/607,678 ) Examiner: M. Charioui  
)  
Filed: June 30, 2000 ) Group Art Unit: 2857  
)  
) Title: EVENT AND SPORT PERFORMANCE  
) METHODS AND SYSTEMS

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I hereby certify that this correspondence, along with all papers referred to as being enclosed or attached, are being deposited with the United States Postal Service with sufficient postage as Express Mail Label No. EV 233152755 US an envelope addressed to: Mail Stop Appeal Brief – Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313.

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Mail Stop Appeal Brief – Patents  
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APPEAL BRIEF

Dear Sir:

In accord with 37 CFR §1.192, and responsive to the Final Action of June 1, 2004, Appellants hereby file their appeal brief in support of their Appeal in the above-identified matter. A notice of appeal was filed October 1, 2004. Three copies of this brief are enclosed, as required under 37 CFR §1.192(c). The \$250 fee required by 37 CFR §1.17c is filed herewith. A one-month extension of time is included herewith, including the appropriate fee, to extend the period for filing this appeal brief to and including January 3, 2005 (as January 1st and 2nd was a weekend).

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- (1) Real party in interest.** The real party of interest is PhatRat Technology, Inc., a Delaware corporation, with an office location of 8408 Brittany Place, Niwot, Colorado 80503; the full right, title, and interests in this application and accorded to PhatRat Technology are illustrated by way of fully-executed assignments executed on May 4, 2000 and recorded with the U.S. Patent and Trademark Office (at reel/frame 011142/0749).
- (2) Related appeals and interferences.** There are no related appeals or interferences.
- (3) Status of claims.** Claims 21-34 are pending in this application, with claim 21 being independent. Applicants appeal all claims 21-34. Claims 21, 26-28 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,721,539 ("Goetzl"). Claim 22 stands rejected as being unpatentable, under 35 U.S.C. §103(a), over Goetzl in view of U.S. Patent No. 6,028,627 ("Helmsderfer") and U.S. Patent No. 5,420,828 ("Geiger"). Claim 23-24 stand rejected as being unpatentable, under 35 U.S.C. §103(a), over Goetzl in view of U.S. Patent No. 5,396,429 ("Hanchett"). Claims 29-34 stand rejected as being unpatentable, under 35 U.S.C. §103(a), over Goetzl and U.S. Patent No. 6,136,021 ("Mickelson").
- (4) Status of amendments.** This application was filed on June 30, 2000, with claims 1-34. A first office action (including restriction requirement) was mailed August 14, 2002, to which a response was filed and entered January 14, 2003, including the cancellation of claims 1-20 and amendments of 21, 22-23 and 26. A final office action was mailed April 14, 2003, rejecting all claims; and then an RCE was filed September 8, 2003, amending claims 23-24, 26-28, 31. A non-final office action was mailed October 16, 2003 and a response to this office action was filed February 17, 2004, amending only the single independent claim 31. On March 17, 2004, the response of February 2004 was re-filed to include a recitation of all claims, pursuant to a notice of non-compliance mailed March 8, 2004. A final rejection was mailed on June 1, 2004, to which the notice of appeal was filed

October 1, 2004. All amendments are deemed entered as reflected in the set of claims included as an appendix hereto.

**(5) Summary of the invention.** The inventions of claims 21-34 relate to an event system including a base station that displays at least one performance metric. One or more mobile sensing units attach with participants in a sporting event; these units sense and then wirelessly transmit data indicative of the performance metric to at least one relay units, which in turn wirelessly relay the data to the base station. The system is for example useful in a snowboarding competition involving a jump over a snow mound. In this example, a sensing unit attaches to the snowboard of each participant in the competition. That sensing unit determines an "airtime" event (as an example of the performance metric) when the participant jumps at the snow mound; it then wirelessly transmits data of the performance metric. A relay unit is nearby to the snow mound and captures the wireless data from the sensing unit; it then relays that data to the base station (or relays the data to another relay unit (see claims 23, 24) if the base station is far away). The base station is located, for example, with the judges; it may include a display device (claim 27) so that judges can see, in near real time, how much airtime (in this example) each participant had for his or her jump. The base station can connect to a scoreboard (claim 26) so that spectators can also see the data. Other sporting metrics like airtime include, for example, spin, tilt, acceleration, distance, g-force (see claim 28).

**(6) Issues.**

- A. Whether claims 21, 26-28 are patentable under 35 U.S.C. § 102(b) due to Goetzl.
- B. Whether claim 22 is patentable under 35 U.S.C. §103 over Goetzl in view of Helmsderfer and Geiger.
- C. Whether claims 23-24 are patentable under 35 U.S.C. §103 over Goetzl in view of Hanchett.
- D. Whether claims 29-34 are patentable under 35 U.S.C. §103 over Goetzl and Mickelson.

(7) **Grouping of claims.** Group I consists of claims 21, 26-28. The claims of Group I do not stand or fall together. Group II consists of claim 22. Group III consists of claims 23, 24. The claims of Group III do not stand or fall together. Group IV consists of claims 29-34. The claims of Group IV do not stand or fall together.

8) **Argument (A).** *Whether Group I claims 12, 26-28 are patentable under 35 U.S.C. §102(b) Goetzl.*

To anticipate a claim, Goetzl must teach every element of the claim and “the identical invention must be shown in as complete detail as contained in the ... claim.” *MPEP 2131* citing *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 2 USPQ2d 1051 (Fed. Cir. 1987) and *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913 (Fed. Cir. 1989). Goetzl does not teach every element of claims 21, 26-28. Amended claim 21 requires the following elements:

- (A) a base station for displaying at least one performance metric;
- (B) one or more mobile sensing units for attachment with participants in a competitive event and for transmitting wireless data representing at least one performance metric; and
- (C) at least one relay unit for receiving the wireless data representing at least one performance metric from the sensing units and for wirelessly transmitting said received data to the base station.

Goetzl discloses a speedometer for in-line skates. The Examiner contends that Goetzl teaches a base station in col. 2, lines 52-63, a mobile sensing unit in col. 2, lines 30-39, and a relay unit in col. 2, lines 47-63 and col. 6, lines 22-31. However we strongly disagree.

Goetzl discloses a transducer 24 in the form that senses rotary movement of a wheel, and a receiver 26, worn on a wrist of a person. See Goetzl, FIG. 1 and col. 3, lines 3-45. The transducer includes the transmitter (see Goetzl, col. 2, lines 39-41) that the Examiner claims is the relay unit of claim 21! Notably, Goetzl does not disclose a base station and one or more relay units as required by claim 21. The Examiner's position, apparently, is that somehow Goetzl's receiver 26 is both the relay unit and the base station or that the transducer is both the sensing unit and the relay unit; it is impossible to tell but in any event Goetzl clearly does not disclose all three elements of claim 21. We thus strongly disagree that Goetzl's receiver can somehow serve

as both the base station and the relay unit or that the transducer can serve both as the sensing unit and the relay unit as in claim 21.

Claims 26-28 depend from claim 21 and benefit from like arguments. But these claims have additional reasons for patentability. For example, claim 26 recites a scoreboard, wherein the base station displays the performance metric on the scoreboard. Claim 26 recites beings with "further comprising" – meaning that claim 26 additionally includes the scoreboard. However the Examiner again contends that the very same receiver 52 of Goetzl is also the scoreboard of claim 26. We think this entirely unreasonable. In fact, that receiver 52 is simply part of the watch worn by the user of Goetzl's skate (see Goetzl, FIG. 4).

In claim 27, the base station has a display, wherein the base station displays the at least one performance metric on the display device. This claim too begins "further comprising" and yet the Examiner now again contends that the display device of Goetzl, col. 2, lines 30-39 and col. 2, lines 54-63, is the same. However this again relates to the same receiver 26 or 52; Goetzl does not disclose a base station display (or even a base station).

In claim 28, the performance metric is at least one selected from the group of rotation, spin, tilt, leaning, acceleration, speed, edge time, distance, drop distance, airtime and g-force. Goetzl only discloses speed of a skate, and not these metrics such as used with the elements of claim 21.

**Argument (B).** *Whether claim 22, Group II, is patentable under 35 U.S.C. §103 over Goetzl in view of Helmsderfer and Geiger.* We contend that the cited art does not render Group II claim 22 *prima facie* obvious. The following is a quotation of from the MPEP setting forth the three basic criteria that must be met to establish a *prima facie* case of obviousness:

To establish a *prima facie* case of obviousness, three basic criteria must be met.

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

MPEP, §2142, citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Claim 22 comprises at least one camera for capturing at least one image and sending data representing said at least one image to the base station. We have argued why Goetzl does not teach or suggest claim 21; claim 22 depends from claim 21 and, similarly, Goetzl does not disclose elements of claim 22. Helmsderfer discloses a camera system for capturing a sporting activity.

First, the combination of Helmsderfer and Goetzl still does not teach or suggest the elements of claim 22. Second, there is no reasonable chance of success in combining these two patents since the result is not, by a long shot, the invention of claim 22 (including the elements of claim 21). The Examiner's combination is exactly the kind of hindsight combination prohibited by U.S. Courts:

In making the assessment of differences, section 103 specifically requires consideration of the claimed invention "as a whole." Inventions typically are new combinations of existing principles or features. *Envtl. Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 698 (Fed. Cir. 1983) (noting that "virtually all [inventions] are combinations of old elements."). **The "as a whole" instruction in title 35 prevents evaluation of the invention part by part. Without this important requirement, an obviousness assessment might break an invention into its component parts (A + B + C), then find a prior art reference containing A, another containing B, and another containing C, and on that basis alone declare the invention obvious. This form of hindsight reasoning, using the invention as a roadmap to find its prior art components, would discount the value of combining various existing features or principles in a new way to achieve a new result - often the very definition of invention.** *Ruiz v. A.B. Chance Co.*, 69 USPQ2d 1686 (CA FC 2004) (emphasis added).

**Argument (C).** Whether claims 23-24 are patentable under 35 U.S.C. §103 over Goetzl in view of Hanchett. We contend that the cited art does not render Group III claims 23-24 *prima facie* obvious.

First, again, Goetzl does not teach the elements of claim 21. For example, Goetzl does not disclose a relay unit as required in claim 21. The Examiner cites Hanchett as disclosing two or more relay units. But, Hanchett is not analogous art; it concerns a traffic condition information

system. Moreover, the combination of Hanchett with Goetzl still does not disclose the elements of claim 21. Not only is the hindsight combination of Hanchett with Goetzl improper, the combination does not teach or suggest all the elements of claim 21.

Nor does the combination then teach the elements of claims 23-24. These two claims require a plurality of relay units (claim 23); in claim 24, the relay units are adjacent to an event area (e.g., where participants jump or create performance metrics like airtime). Hanchett and/or Goetzl simply do not have any teaching of these features.

**Argument (D).** Whether claims 29-34 are patentable under 35 U.S.C. §103 over Goetzl and Mickelson. We contend that the cited art does not render Group IV claims 29-34 *prima facie* obvious.

Group IV claims 29-34 depend from claim 21 and benefit from like arguments. Specifically, again, Goetzl cannot teach or suggest the elements of claim 21. Like the other hindsight combinations cited by the Examiner, Mickelson is cited merely because it discloses a "navigation system for spinning projectiles." Mickelson is not reasonably analogous art. But more importantly the combination of Mickelson with Goetzl simply does not disclose the elements of claim 21 and its dependent claims 29-34. For example, here are features not disclosed by the combination of Goetzl with Mickelson:

- base station, one or more relay units and one or more sensing units (claim 21).
- the performance metric includes a rotation rate or total rotation (claim 29).
- the performance metric includes a rotation component (claim 30).
- the sensing unit includes an accelerometer (claim 31); we disagree strongly with the Examiner's argument that an accelerometer is the same as (or obvious in view of) Mickelson's magnetic field sensing device. Moreover, if this rejection persists we ask for evidence as to how one would consider an accelerometer obvious in view of a magnetic field sensor, pursuant to MPEP §2144.

- the sensing unit includes at least one magnetic field sensing device (claim 32); it is true that Mickelson discloses a magnetic spin sensor, but Mickelson and Goetzl still do not teach the elements of claim 32, including elements of claim 21.
- the sensing unit further includes one or more pitch and roll sensors (claim 33).
- the sensing unit includes one or more magnetic field sensing devices indicating 3 axes of rotation (claim 34).

(9) **Appendix.** Appellants enclose a copy of the claims involved in this appeal as an appendix hereto.

Conclusions

Accordingly, Applicants respectfully submit that the claims Groups I-IV patentably distinguish over the art of record. Other than the extension of time, no further fees are deemed due in connection with this matter. However, the Commissioner is hereby authorized to charge any fees which may be due in this matter from Deposit Account Number 12-0600.

Respectfully submitted,

Lathrop & Gage L.C.

By: 

January 3, 2005

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**APPENDIX TO APPEAL BRIEF**

21. (Previously amended) An event system comprising:  
a base station for displaying at least one performance metric;  
one or more mobile sensing units for attachment with participants in a competitive event  
and for transmitting wireless data representing at least one performance metric;  
and  
at least one relay unit for receiving the wireless data representing the at least one  
performance metric from the sensing units and for wirelessly transmitting said  
received data to the base station.
22. (Previously amended) The system of claim 21, further comprising at least one  
camera for capturing at least one image and sending data representing said at least one image to  
the base station.
23. (Previously amended) The system of claim 21, wherein the at least one relay unit  
includes at least two relay units.
24. (Previously amended) The system of claim 23, wherein the at least two relay units  
are located proximate to an event area.
25. (Original) The system of claim 24, wherein the event area is a half pipe event  
area.
26. (Previously amended) The system of claim 21, further comprising a scoreboard,  
and wherein the base station displays the at least one performance metric on the scoreboard.

27. (Previously amended) The system of claim 21, further comprising a display device electrically coupled to the base station, and wherein the base station displays the at least one performance metric on the display device.

28. (Previously amended) The system of claim 21, wherein the performance metric is at least one selected from the group of rotation, spin, tilt, leaning, acceleration, speed, edge time, distance, drop distance, airtime and g-force.

29. (Original) The system of claim 21, wherein the performance metric includes a rotation rate or total rotation.

30. (Original) The system of claim 21, wherein the performance metric includes a rotation component.

31. (Original) The system of claim 30, wherein the sensing unit includes an accelerometer.

32. (Original) The system of claim 30, wherein the sensing unit includes at least one magnetic field sensing device.

33. (Original) The system of claim 32, wherein the sensing unit further includes one or more pitch and roll sensors.

34. (Previously amended) The system of claim 30, wherein the sensing unit includes one or more magnetic field sensing devices indicating 3 axes of rotation.